SUGAR and PLANTATION NEWS

FORMER HONOLULAN REVIEWS INDUSTRY

America Caught Napping In Fields Will Conquer the World

So Says Dr. L. L. Van Slyke of Impetus Given American Industries By War

Dr. L. L. Van Slyke, head of the chemistry department of the New York experiment station at Geneva in a recent address gave a resume of "war's effect on the chemical industries." In the early days Dr. Van Slyke was a teacher at Punahou. He spent several months vacation in Honolulu last year and was widely entertained, and his views on this important topic will therefore prove doubly interesting, because of his eminence in the scientific field, to his friends here.

In part, Dr. Van Slyke addressing the Business Men's Lunch Club, at Geneva, said:

"To many people, chemistry is chiefly the science of "smells" and the industrial branch is simply the chemistry of dollars and cents.

Chemistry Is Scientific Efficiency

"Chemical industry or industrial chemistry is the application of the science of chemistry to the promotion of the material welfare of mankind by decreasing the cost of the necessities of life and multiplying the number and variety of its conveniences and comforts. It takes old methods and resources and improves their efficiency; it finds new resources and develops them into new and useful products.

"In presenting this subject, I have in view: (1st) To give you some idea of what our chemical industries are, their immensity, complexity, economic importance and wide usefulness. (2nd) Some facts illustrating the effects of the war upon our chemical industries in general and a few in particular. (3rd) The industry of the coal tar dyes. Any one of these topics affords material enough for a course of lectures and it is obvious that the treatment must be brief and necessarily superficial.

Many Industries

"We commonly think of a chemical industry as one concerned chiefly with the manufacture of chemicals and drugs. It means much more. Every industrial operation which calls for chemical control is a branch of industrial chemistry or chemical industry. There are literally hundreds of them.

You can get a rough idea of the extent of our chemical industries if I give a list of about forty different groups: asphalt, artificial camphor, baking-powders and yeast, bleaching, cleaning and polishing preparations, brewing, canned and preserved foods, celluloid and nitrocellulose, cement, chemicals proper and pharmaceutical products, chocolate and cocoa, confectionery, coal tar oils and products, coke products, dyes and dye materials, earthenware, porcelain, china, etc., explosives and combustibles, fertilizers, flour, glass, incandescent gas mantles, illuminating and heating gas, leather and tanning extracts and milk products.

Another Group Includes

"Metals and ores, such as copper, iron, steel, aluminum, lead, nickel, zinc, gold, silver, alloys, etc., mineral oils, petroleum, etc., oil cloth and linoleum, oleomargarine, paints and varnish, rubber, natural and artificial, photographic materials, paper, films, dry plates, developing agents, etc., soap and fat products, soda, sugar and starch, textiles, mercerized cotton, artificial silk, dyeing, etc., vegetable oils, cottonseed, olive, peanut, etc., volatile oils and synthetic perfumes, waters, mineral, etc., wood-fiber and chemical paper, wood-distillation products, wood alcohol, acetic acid, acelone, creosote charcoal, turpentine, etc.

"The number of chemical-industrial establishments in the United States, aggregates many thousands, representing billions of dollars of capital, and employing hundreds of thousands of workmen. About one-fourth of all our manufactured products come from chemical industries and about one-fifth of our workmen are engaged in them.

"This brief, outline statement is sufficient to give some appreciation of the overwhelming immensity complexity, and importance of our chemical industries.

"The rise of chemical industries has taken place practically within fifty years and the growth has been particularly rapid in the last twenty five. Wholly new chemical industries have been created from old resources developed anew and new resources discovered. In the old chemical industries, accurate, dependable and nonfailing methods of operation by chemical control have been substituted for those "I—of thumb," "helter-skelter" and "hit-and-miss" methods which once gave to such industries the character of lotteries. There is not a single field of industrial enterprise which has not been in some way helped by chemistry.

Corn, Dyes and Fertilizers

Dr. van Slyke spoke in detail of the hundred or more products now manufactured from corn by chemical processes; the tremendous development of the soap industry, Portland cements, textiles, paper and pulp, wood waste utilization and dyes. Every one thousand pounds of coal can be made to produce 7.5 pounds of dyes, he stated.

Potash, phosphoric acid and nitrogen have increased many times in value since the war, he said, because American chemical production was perhaps weaker here than in almost any other line.

America Taking Up the Slack

"The general effect of the war upon the chemical industries of the United States will ultimately be to make us less completely dependent upon any foreign countries for any industrial product that is really essential to our economic welfare. For example, we have depended upon Germany's Jena glass for our best laboratory utensils. At the present time the Corning Glass Works is making chemical glassware which is equal to Jena glass in every respect and superior to it in some. When the war is over Jena glassware will have lost its market here.

"In the matter of potash supplies, there are being developed in the United States resources which promise to make us much less dependent on the Stassfurt products. And this will undoubtedly be found to be true along many or all lines of industrial chemistry.

Lack of Foresight

In conclusion, Dr. Van Slyke said, "from a strictly economic point of view, coal-tar dyes can hardly be said to be vital or essential, that is we could get along without them and suffer no hardship. In comparison with some of our chemical industries, the coal-tar dye industry does not look large.

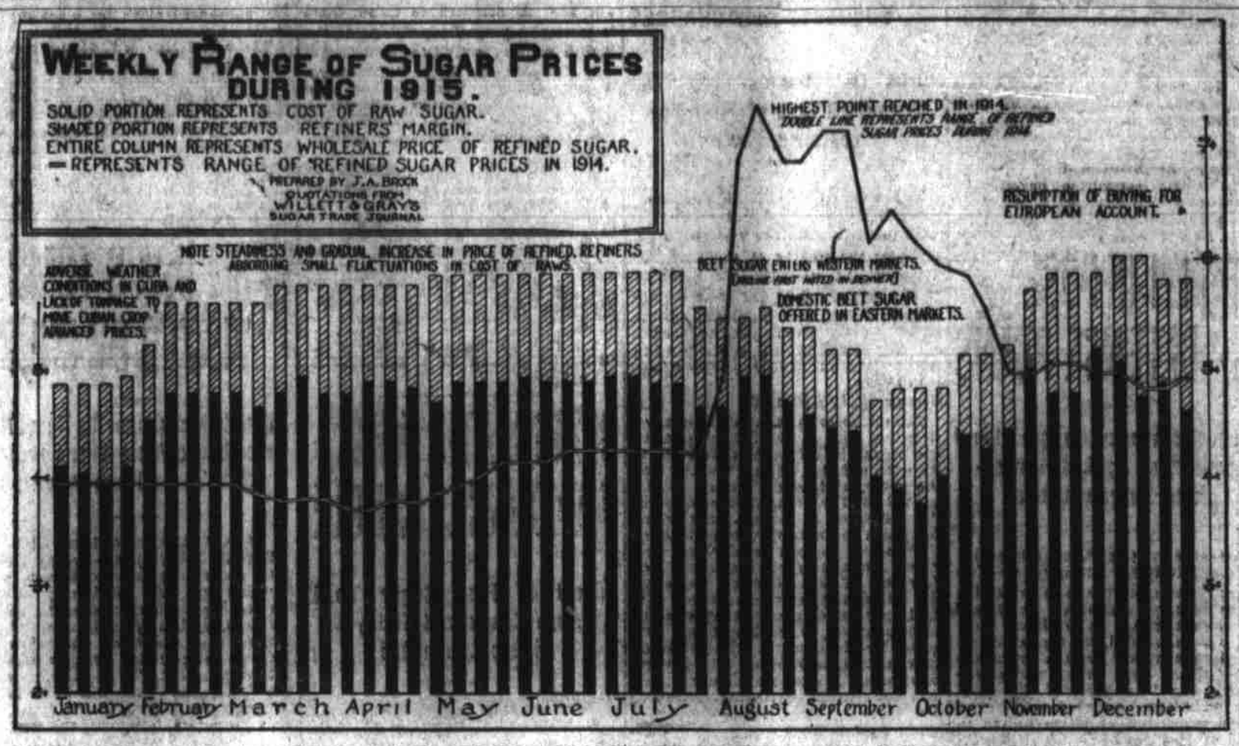
"Much younger American chemical enterprises which make American specialties, for instance the Eastman Kodak Company, which sends its films and photographic papers throughout the whole world, have annual earnings decidedly greater than the most successful German chemical works of much greater age. And yet, owing to the lack of economic foresight on the part of our textile manufacturers, there is at present a most serious condition for them and for those who depend upon textile materials.

Future Commercial Supremacy

"Such an experience as the present one seems to have been absolutely necessary to open our eyes, to shock us out of our smug complacency and enable us to appreciate our lack of commercial independence. The warning and the lesson should be regarded as thoroughly timely and providential, on the whole.

"We have no reason whatever to be ashamed of the progress attained in chemical industries here, but we shall be fools if we fail to extend those industries along lines in which we know from painful demonstration that we are now lamentably deficient. We have reason to look for a development of our chemical industries in the United States such as is essential to a reasonable economic independence and to our highest welfare."

Table Showing Sugar Prices In United States During Year 1915



THE European war continued during 1915 to be the dominant factor affecting sugar prices. With the output of beet sugar in continental Europe largely reduced, and with such European supplies as existed locked up in the countries of production due to war conditions, the burden of satisfying the world's sweet tooth fell in larger measure than for many decades past upon the cane producing countries. Cuba in particular, possessing by far the largest exportable surplus of any country in the world, found a strong demand for its product instead of depending as usually almost entirely upon the American market. With Cuban and domestic crops reaching a total of over four and a half million long tons, or approximately three-quarters of a million tons more than total requirements for American consumption, this situation was important to American sugar producers. It lightened the stress of Cuban competition which otherwise would have been felt in full effect by the American market, and would have resulted in a low level of prices throughout the year.

At the beginning of 1915 the sugar trade was inclined to look for lower prices. Before the end of January, however, it was realized that the Cuban crop was moving to market much more slowly than usual which led to a sharp upturn in prices at the beginning of February.

With the coming of better weather conditions in Cuba and an improvement in the shipping situation, the upward movement lost much of its momentum, but prices continued to advance from time to time. Throughout the summer months from the beginning of May to the latter part of July the quotation on refined sugar was maintained steadily at 6 cents, or a net cash price of 5.88 cents a pound, the refiners absorbing the relatively slight fluctuations in the price of raws, and maintaining their margin at about 1 cent a pound.

Due to the stimulus of relatively high prices brought about by the European war the acreage planted to beets in the United States in the spring of 1915 was larger than ever before, and indicated a probable crop one hundred thousand tons or more above the best previous record of the beet industry. The first of this crop reached the Western consumers early in August, and it exercised a pronounced effect on sugar prices. From this date on the amount of beet sugar offered in Eastern markets rapidly increased as more and more of the beet factories began operating. Under the influence of these continued offerings at 25 to 45 points below refiners' quotations, the price of all refined sugars gradually declined until by the end of the third week in September it had reached a low point of 4.70 cents a pound as compared with 5.88 cents during the earlier part of the summer, or a reduction of over a cent pound, due chiefly to the competition of the home-grown product.

One factor that undoubtedly carried this decline in prices to an extreme which it would not have reached otherwise was the impending prospect of free sugar on May 1, 1916. Domestic beet interests naturally desired to market their product as far as possible in advance of this date, and the importing refiners were inclined to look with complacency upon this tendency as likely to reduce to a negligible point competition from this source later on. The result was that the extreme low level reached at the beginning of October marked what may be described as abnormal or panic competition.

A number of influences soon came into play which tended to neutralize this abnormal depression. One of these was the announcement made by Secretary of the Treasury McAdoo early in October that he would recommend the continuation of the import duty on sugar, which relieved the fear that the entire beet sugar crop would be rushed to market, and to some extent lessened the actual pressure from this sugar. The slides in the Panama Canal which interrupted traffic and delayed the arrival of Hawaiian cargoes also had an influence, as did a recurring scarcity of tonnage which sent freight rates soaring and prevented the prompt shipment of supplies from Cuba. Purchases for foreign account were resumed and operated to remove any fear of an oversupply for the domestic market during the early part of 1916. The combined influence of these factors served to bring about a recovery of prices during the final weeks of the year, so that the twelvemonth closed with quotations at approximately the same level that they had maintained during the early part of the summer season. The yearly average, net cash quotation of the seaboard refiners for granulated sugar was 5.5577 cents a pound, while the average price of 96 degree test sugar was 4.6538 cents. The refiners' margin for the year averaged .9039 cents a pound.

Record and Forecast of Hawaiian Sugar Crops as of Uneven Dates to Feb. 1, 1916

The Hawaiian sugar plantation fiscal year is from Oct. 1 to Sept. 30.

There are forty-five sugar mills in Hawaii. In addition thereto, there are seven independent cane planters, whose cane is ground on shares, who do business on such a large scale that their share of sugar is listed separately.

Planters without mills are indicated hereunder by a *.

Statistics are of tons of 2000 lbs. each.

NAME OF PLANTATION.	Crop of 1915—Tons of Sugar, Oct. 1, 1914, to Sept. 30, 1915.	Crop of 1916, Agents' and Sugar Factors' Estimate as of Jan. 1, 1916	Crop of 1916—Tons of Sugar Shipped, Feb. 1, 1916
HAWAII.			
Olaa Sugar Co., Ltd.	27,408	26,000	145
Waiakea Mill Co.	16,141	14,500	
Hilo Sugar Co.	17,900	17,500	539
Hawaii Mill Co., Ltd.	3,793	1,56	
Onomea Sugar Co.	21,320	19,000	
Pepeekeo Sugar Co.	11,947	9,000	
Honomu Sugar Co.	9,85	8,500	
Hakalau Plantation Co.	19,32	17,000	
Laupahoehoe Sugar Co.	11,73	10,50	2,572
Kaiwiki Sugar Co., Ltd.	6,84	5,50	103
Kukaiau Plantation Co.	4,672	3,50	144
Hamakua Mill Co.	9,26	8,50	242
Panuhau Sugar Plantation Co.	10,073	8,000	
Honokaa Sugar Co.	8,612	6,500	
Pacific Sugar Mill	7,252	6,000	
Niulii Mill and Plantation	3,098	2,50	
Halawa Plantation	2,840	1,40	
Kohala Sugar Co.	7,786	5,00	
Union Mill Co.	3,43	3,00	361
Hawi Mill and Plantation	9,42	6,60	
*Peaken Plantation	1,42	1,30	
Kona Development Co., Ltd.	3,444	140	110
Hutchinson Sugar Plantation Co.	6,781	8,000	448
Hawaiian Agricultural Co.	16,407	17,500	1,062
	240,785	207,00	5,753
MAUI.			
Pioneer Mill Co., Ltd.	33,229	31,000	1,544
Olowalu Co.	2,175	1,85	
Wailuku Sugar Co.	19,17	18,00	1,077
Hawaiian Coml. and Sugar Co.	56,7	58,00	8,057
Maui Agricultural Co.	39 62	37,00	5,880
Kaeleku Plantation Co., Ltd.	6,69	6,00	
Kipahulu Sugar Co.	2,69	1,00	
	160,283	152,85	16,558
OAHU.			
Honolulu Plantation Co.	18,233	18,00	2,763
Oahu Sugar Co., Ltd.	29,60	30,00	3,603
Ewa Plantation Co.	29,50	29,60	2,063
*Apokaa Sugar Co., Ltd.	356	85	
Waianae Co.	6,40	4,00	
Waialua Agricultural Co., Ltd.	31,156	30,00	2,765
Kahuku Plantation Co.	7,822	7,00	684
*Laie Plantation	1,171	1,20	253
*Koolau Agricellural Co., Ltd.	487	1,10	
Waimanalo Sugar Co.	5,260	4,20	
	129,997	125,95	12,111
KAUAI.			
Lihue Plantation Co., Ltd.	21,494	22,40	2,901
*Grove Farm Plantation	4,00	4,15	
Koloa Sugar Co., The	9,502	8,000	709
McBryde Sugar Co., Ltd.	15,458	16,00	500
Hawaiian Sugar Co.	24,70	25,00	2,009
*Gay & Robinson	5,25	5,00	162
Waimea Sugar Mill Co., The	1,404	1,90	
Kekaha Sugar Co., Ltd.	15,07	15,00	3,879
*Estate V. Knudsen	795	80	200
Kilauea Sugar Plantation Co.	6,733	6,00	484
Makee Sugar Co.	10,044	10,00	620
	115,38	114,25	11,437
	1915		
Hawaii	240,78	207,00	5,753
Maui	160,283	152,85	16,558
Oahu	129,997	125,95	12 111
Kauai	115,380	114,25	11,437
TOTALS	646,44	600,05	45,859

WILLETT & GRAY REPORT NO CHANGE

New York Brokers State That Cuban Supply Rules the Market

Refiners bought 433,000 bags Cubas during the week ending January 27. In their weekly statistical report Willett & Gray state, in part, that stocks in the United States and Cuba together were 230,076 tons, against 191,952 tons last week and 275,135 tons last year, a decrease of 45,059 tons from last year.

The advance noted last week, culminated at 4.77c per lb, for the January, February and March shipments.

The feature of the week was that planters and sellers generally were satisfied to sell largely at this basis, and also that refiners were equally satisfied to buy largely at this basis. All refiners participated to some extent in the buying, and some few operators took part in same.

Market Was Steady

The total sales of Cubas at the basis of 4.77c were quite large, and a moderate amount of Porto Ricos were included at their present corresponding value for free duty sugar at 4.64c per lb.

That the present value of Cuba is satisfactory sellers is further evidenced by the fact there are at this writing further considerable amounts offered on the market at the current quotation, which is not surprising in view of the rapid progress of the production of sugar in Cuba under rather extremely favorable weather conditions.

Cubans Control Situation

As to the immediate future the outlook depends more largely on the pretentions of Cuban producers than on other features. If there should be a slackening in the disposition of buyers to continue purchases, with which they are mostly well supplied for the present and For February use, then some estates in Cuba which did not participate in the free purchases may desire to dispose of some of their production even at some small concessions from present values.

This is what is naturally looked for by many sugar experts, even by those who count upon considerably higher prices later on in the season.

The same conditions as noted last week prevail—increasing production and stock in the Island. The figures are as follows: Receipts for the week ending January 22, 110,932 tons against 71,000 tons and 93,000 tons in the two preceding years.

Cubans Very Busy

Exports for the week were 66,809 tons, of which 9,950 tons were destined for Europe, and the balance, 56,859 tons, to the United States Atlantic Ports. Stock January 24 increased to 146,288 tons against 103,000 tons last year, and on that day 164 Centrals were grinding, compared with 148 last year and 161 in 1914. Visible production to January 22 is 357,855 tons against 209,676 tons and 387,181 tons in the two preceding years. The weather has continued favorable for harvesting during the week. According to our latest cable there are 163 Centrals grinding.

The Philippines 1916 estimate is 300,000 tons, of which 35,850 tons will be centrifugals, the balance muscovados.

There was no note worthy change in the refined sugar market.

Refined

There is a constant small order demand for refined for export which is sufficient, together with the domestic demand, to keep refiners well employed.

Buyers at home appear well supplied for their February wants, and hence are buying only moderately for future supplies.

According to Deutsche Zuckerindustrie of December 24, 1915, Germany will increase its beet acreage during 1916.

Big German Crop Predicted

"There are many reasons for the increase. First is that the demand for sugar must at least be considered of the same quantity as the year before, then the causes that have called forth the increased demand are considered later. Molasses has proven a basis in the war, for the supply of fodder. Besides a number of factories are being built, in which, by using molasses, food yeast will be produced. But needed raw materials must be assured for these operations, for no doubt can longer exist that it is pressingly necessary to increase the permanency of food containing albumen.

"Of 34,500,000 hectares of lands used for agriculture in 1913, 518,000 hectares, or some 1½ per cent were planted with sugar beets for the sugar production. In the 10 years, 1904 1913, about 28.8 tons of beets were harvested per hectare. If one estimates the decrease in production on account of the existing manuring and delivering difficulties as 6 tons per hectare this corresponds to a diminished harvest of about 20 per cent.

What To Expect

According to this only 12,200,000 tons of beets were to be expected with certainty from the 655000 hectares planted in 1913, while in the year 1913, with a yield per hectare of 31.8 tons, 16,900,000 tons of beets were harvested. On an average (without molasses outturn) 6.5 parts of beets produce one part of raw sugar, so the 12,200,000 tons of beets, calculated for 1916, would correspond to 1,900,000 tons of raw sugar, while the 16,900,000 tons of beets of the year 1913 would deliver 2,600,000 tons. With certainty it can be accordingly figured the plantings of 1916 will only produce 73 per cent of the sugar production of 1913, with the same amount of land planted.

"In normal times the sugar demand in the Empire amounts to 1,500,000 tons.

"Every farmer planting beets ought to exert himself to at least plant the same amount of beets as heretofore, but if at all possible, he ought to plant one-fifth to one-quarter more than usual.

BATTELLE PROCESS MEETS OBSTACLES

Stockholders Meeting Called To Discuss Ways and Means For the Future

Due, it is said to the opposition of the "Sugar Trust" the Battelle Sugar Refining Company of Hawaii has not had the success anticipated in Cuba and Louisiana in installing its process for the making of white sugar. For this reason many of the stockholders of the concern in Hawaii among whom are numbered some of the keenest financiers and sugar men of the islands have rather given up hope of the success of the proposition and have lagged in the payment of their assessments.

Several weeks ago a notice was sent out to the shareholders that a meeting of the board of directors had decided to make a proposition to them. The statement sent to the owners of stock, informed them that the company had tried since its organization to install in a commercial way the Battelle process of refining but without success. That the funds of the company were about exhausted and that it had been deemed advisable by the board to advertise and sell stock upon which assessments had been called but which remained delinquent.

The notice of sale has been published and the sale will be held on the seventeenth of this month, at noon at the auction rooms of J. F. Morgan & Co., unless the assessments delinquent are previously paid.

Leeway Asked

The originator and principal stockholder of the company made through the directors three propositions to those holding stock, which were as follows:

"First—That the exploitation of our process continue substantially as it has the past two years."

"Second—That an option be given Mr. Battelle, extending over a period of two years, for the purchase of all assessable and non-assessable stock which is at this time not standing in his name. Mr. Battelle will stand the expense incidental to exploitation from this city while all taxes due and payable on our foreign patents during that time will be paid from the Company's funds. This will not, Mr. Battelle believes, amount to more than $200.00 per year and all other expense such as advertising and that incidental to the treasurership will cease. The amount of purchase, will be left to the suggestion of the stockholders and subject to Mr. Battelle's agreement."

"Third—That a reorganization of the company be made, issuing 7% bonds and these bonds be given in exchange for all stock not standing in Mr. Battelle's name. This will place all assessable and non-assessable stock in Mr. Battelle's hands and the bonds to the assessable and non-assessable stockholders. A stipulation will also be made with the issue of such bonds, that interest will be cumulative for the first two years and foreclosure proceedings will not be effected until the two years have expired."

Options Not Practical

The directors were not in favor of the first and third proposition stated in the circular issued to shareholders. The options were considered impracticable from a financial standpoint and it was so stated.

"The second proposition met with the informal approval of the directors in so far as their individual stock was concerned and in so far as it would be necessary for them to authorize Battelle to represent the company. Further than that they did not care to go as it would have required the action of the stockholders in their individual capacities rather than the directors to procure an option upon all the stock.

Have Not Lost Faith

A form of option covering the three propositions made by Battelle was forwarded to all stockholders for them to decide for themselves what they wanted to do, with the understanding that the option of those sending them to the treasurer would not be forwarded to Battelle unless all the other stockholders executed a similar option.

Since the advertisement of the sale a great many of the stockholders have paid their assessments as they have faith in the ultimate success of the process if it is given a chance. Should the company get one big sugar mill to adopt its process there would be plain sailing ahead for the concern but the Sugar Trust stands in the way, it is said, and that is some obstacle to be overcome.

'Leafiness' and Sucrose

Experiments with sugar beets have proved that a direct relation exists between the amount of leaf surface and sugar contents of the roots. The same character probably also applies to cane varieties to a greater or less extent. In selecting new cane varieties preference given exceptionally leafy sorts will probably be well repaid.

(Additional Sugar and Plantation News on Page 7)